WASTE MANAGEMENT OF HAWAII
92-460 Farrington Highway
Kapolei, Hawaii 96707
(808) 668-2985

December 15, 2011

VIA U.S. MAIL & E-MAIL

U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105
Attn: Lawrence Torres (WTR-7)

Hawaii Department of Health
Clean Water Branch
P.O. Box 3378
Honolulu, HI 96801-3378
Attn: Mike Tsuji

RE: Issuance of Findings of Violation and Order for Compliance for Waimanalo Gulch Sanitary Landfill – CWA-309(a)-12-003

Dear Sirs:

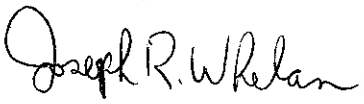
Pursuant to the November 29, 2011, Finding of Violation and Order ("Order") in the above referenced matter, enclosed please find a letter report prepared by AECOM on behalf of Waste Management of Hawaii, Inc. ("WMH"), regarding the *Status of Western Surface Water Drainage System Construction, Waimanalo Gulch Sanitary Landfill, Kapolei, HI.* The enclosed letter report provides reasonable best estimates of the dates projected by AECOM for completion of the major elements of the Western Surface Water Drainage project, referred to in the Order as the Western Diversion Project ("WDP").

As mention in yesterday's correspondence from our legal counsel (Andrew Kenefick), WMH would like to discuss with EPA further information pertaining to the WDP, as well as WMH's concerns regarding the Order. Although WMH has raised a number of issues with respect to the Order, we are submitting this report by the December 15th deadline, without waiving our objections to the Order, to apprise EPA of how close WMH is to the completion of the WDP.

Pursuant to Paragraph 16 of the Order: I certify under penalty of law that the AECOM letter report regarding the *Status of Western Surface Water Drainage System Construction, Waimanalo Gulch Sanitary Landfill, Kapolei, HI*, and attachments, were prepared under my direction and supervision in accordance with a system designed so that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

We look forward to the opportunity to discuss this matter with you. Please let us know when we can schedule a meeting or conference call.

Sincerely,



Joseph R. Whelan
General Manager

Enclosure

cc: *via e-mail only*
David Wampler – EPA Region 9
Dana Viola – City & County of Honolulu
LL3 to EPA re Stormwater FVO - Construction Status (12/15/11)

AECOM
1001 Bishop Street, Suite 1600
Honolulu, Hawaii 96813-3698
www.aecom.com

808 523 8874 tel
808 523 8950 fax

December 14, 2011

Waste Management of Hawaii
Waimanalo Gulch Sanitary Landfill
92-460 Farrington Highway
Kapolei, Hawai'i 96707

Attention: Mr. Joe Whelan

Subject: Status of Western Surface Water Drainage System Construction, Waimanalo Gulch Sanitary Landfill, Kapolei, HI

Dear Mr. Whelan:

1.0 INTRODUCTION

At the request of Waste Management of Hawaii (WMH), AECOM Technical Services, Inc. (AECOM) has prepared this letter report summarizing the construction status of the Western Surface Water Drainage (WSWD) Project at the Waimanalo Gulch Sanitary Landfill (WGSL) located at 92-460 Farrington Highway in Kapolei, Hawai'i. AECOM has provided construction quality assurance (CQA) services for the construction phase of the WSWD project. Construction of the WSWD is being performed by WMH's general contractor for the project, Goodfellow Brothers, Inc. (GBI). The construction work is being performed in accordance with the following construction drawings:

- *Construction Drawings, Waimanalo Gulch Landfill, Western Surface Water Drainage Project, Ewa Beach, O'ahu, Hawai'i, Dated January 13, 2010 by GEI Consultants, Inc.*
- *Construction Drawings, Waimanalo Gulch Landfill, Lower Western Bypass, Ewa Beach, O'ahu, Hawai'I, Dated June 21, 2011 by GEI Consultants, Inc.*

After construction of the WSWD is completed, AECOM will provide a detailed CQA documentation report that will summarize construction work completed, provide observations and testing performed for the WSWD including daily reports, photographs, soils and concrete testing results. The purpose of this letter report is to summarize the components of the WSWD that have been completed to date to assist WMH in responding to a recent order from the U.S Environmental Protection Agency. Also attached is a construction schedule provided by GBI that provides an estimate of when the remaining WSWD construction features will be completed (see Attachment A).

2.0 CONSTRUCTION COMPLETION STATUS

The following provides a completion status of the key components of the WSWD project starting from the upstream end:

- **Diversion Structure**. The reinforced concrete Diversion Structure located at Station 64+97 to 66+17 (upstream of landfill) is functionally complete to divert up-gradient storm water run-on as of December 14, 2011 (Attachment B, photo no. 1).

- **Conveyance system, box culvert**. The 10-ft high by 10-ft wide, box culvert portion of the WSWD project conveyance system extends from Station 52+44 to Station 64+37. A reinforced concrete lined open channel transitions the box culvert into the Diversion Structure from Station 64+37 to 64+97. The box culvert and open channel portions of the WSWD are functionally complete to divert up-gradient storm water run-on as of December 14, 2011 (see Attachment B, photo no. 2).

- **Conveyance system, HOBAS pipe**. The WSWD conveyance system from Station 0+32 to Station 52+44 consists of HOBAS pipe with diameters ranging from 78 to 104-inches. As of December 14, 2011, the HOBAS pipe sections are functionally complete to divert up-gradient storm water run-on (see Attachment B, photo no 3).

- **Flip Bucket Structure.** The flip bucket structure is a reinforced concrete discharge structure that conveys the storm water from the HOBAS pipe to the Stilling Basin and is located between Stations 0+00 to 0+32. As of December 14, 2011, the Flip Bucket Structure is functionally complete to divert up-gradient storm water run-on (see Attachment B, photo no. 4).

- **Stilling Basin (Plunge Pool).** The rip-rap lined Stilling Basin area (also referred to as the Plunge Pool on the Construction Drawings) and the grouted rip-rap outflow weir are partially complete. Based on the construction schedule (see Attachment A) the Stilling Basin and outflow weir will be functionally complete to manage drainage of storm water by December 16, 2011. A photo of the Stilling Basin area as of December 13, 2011 is presented in Attachment B, photo no. 5.

If you have any questions or need more information about this project please call me at (808) 356-5321.

Sincerely yours,

Ronald E. Boyle, P.E.
CQA Project Manager
AECOM Technical Services, Inc.

Attachments:

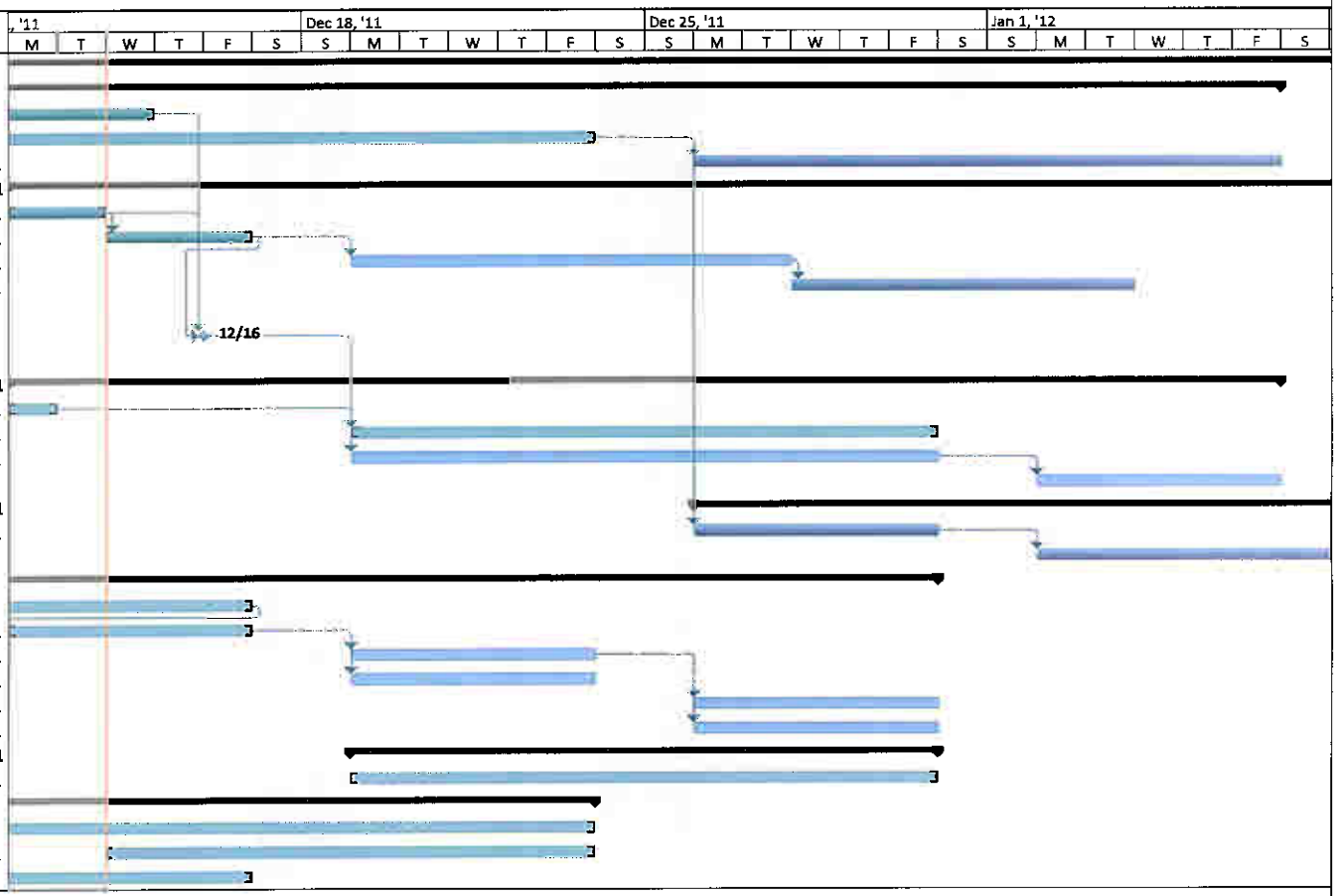
A Construction Schedule dated December 14, 2011
B Photo Log

cc: Jesse Frey, Waste Management of Hawaii
Matt Heahlke, Goodfellow Brothers, Inc.

Attachment A
Construction Schedule
(Provided by Goodfellow Brothers, Inc.)

Waimanalo Gulch Sanitary Landfill
3-Week Look Ahead Schedule

ID	Task Name	Duration	Start
1	**Western Surface Water Drainage Project**	**70 days**	**Mon 11/7/11**
2	**Lower Western Bypass**	**45 days**	**Mon 11/7/11**
3	Install 84" Hobas	28 days	Mon 11/7/11
4	Backfill 84" Hobas	15 days	Mon 12/5/11
5	Inspection Manholes 1 & 2	10 days	Mon 12/26/11
6	**Stilling Basin**	**25 days**	**Mon 12/12/11**
7	Backfill Weir	2 days	Mon 12/12/11
8	Rock Invert of Stilling Basin-Functional	3 days	Wed 12/14/11
9	Rock Side Slopes of Stilling Basin	7 days	Mon 12/19/11
10	Side Walk/ Sampling Station	5 days	Wed 12/28/11
11	Stairs	5 days	Mon 1/9/12
12	**Western Surface Drainage Project Functionally Complete**	0 days	Fri 12/16/11
13	**Misc. Site Onsite Drainage**	**20 days**	**Mon 12/12/11**
14	36" HDPE 0+00 to 6+00-Operational	1 day	Mon 12/12/11
15	36" HDPE 0+00 to 6+00-Backfill	10 days	Mon 12/19/11
16	Operational Drainage	10 days	Mon 12/19/11
17	Extend Existing 36" Pipes	5 days	Mon 1/2/12
18	**Landscaping**	**35 days**	**Mon 12/26/11**
19	Temp Irrigation/Grassing	5 days	Mon 12/26/11
20	Landscaping Establishment	30 days	Mon 1/2/12
21	**North Drainage**	**40 days**	**Mon 11/7/11**
22	Trench Excavation	30 days	Mon 11/7/11
23	Install 36" Pipe	5 days	Mon 12/12/11
24	Thrust Block Connection at Diversion	5 days	Mon 12/19/11
25	Inlet Structure	5 days	Mon 12/19/11
26	Rock at Diversion	5 days	Mon 12/26/11
27	Cast In Place Inspection Manhole	5 days	Mon 12/26/11
28	**East Drainage**	**10 days**	**Mon 12/19/11**
29	Parking Lot Drainage	10 days	Mon 12/19/11
30	**Western Site Surface Drainage**	**15 days**	**Mon 12/5/11**
31	Smart Swale 0+00 to 26+00	15 days	Mon 12/5/11
32	Stilling Basin sta 10+50	8 days	Wed 12/14/11
33	Grade/Rock Road 11+00 to 26+00	10 days	Mon 12/5/11



Project: 6705 Drainage Improvem
Date: Wed 12/14/11

Task
Split
Milestone
Summary
Project Summary
External Tasks
External Milestone
Inactive Task
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
Deadline
Progress

Attachment B
Photo Log

Photo 1: View of diversion structure and concrete lined open channel transition to box culvert, looking southwest.

Photo 2: Concrete lined open channel transition to box culvert, looking west.

Photo 3: Backfilling 84-inch HOBAS pipe near station 5+00, looking north.

Photo 4: Downstream end of HOBAS pipe transitioning into the flip bucket structure, looking west.

Photo 5: Stilling basin (plunge pool) under construction, looking south.